REMARKS

Claims 2, 4, 7-32, 34, 35, 37, 39 and 42-59 are pending in this application, all of which stand rejected. In the final Office Action mailed on June 23, 2004 (Paper No. 8), the Examiner rejected all the pending claims under 35 U.S.C. § 102(b) over U.S. Patent No. 6,006,267 to Nguyen et al. ("Nguyen"). Applicant hereby amends claims 7, 25, 35 and 42 to more particularly point out and distinctly claim Applicant's invention, and cancels claim 34. As a result, claims 2, 4, 7-32, 35, 37, 39 and 42-59 are pending. Applicant respectfully traverses the Examiner's rejection. Further examination and review in view of the remarks below are respectfully requested.

Applicant's techniques are directed to automatically determining an appropriate transmission method in a network. A client tests the availability of a first transmission method – e.g., a unicast method – by transmitting at least one packet using the first transmission method to a host. Subsequently, a response packet is received from the host in response to a packet transmitted using the first transmission method. If the client is configured to insist on only using the first transmission method, then the client uses the address contained in the response packet received from the host to configure a communications link to the host using the first transmission method.

Otherwise, if the client does not insist on using the first transmission method, the client tests the availability of a second transmission method – e.g., a multicast method – by transmitting at least one packet using the second transmission method to the host. If a response packet is subsequently received from the host using the second transmission method, the client uses the address contained in the response packet received from the host to configure a communications link to the host using the second transmission method. However, if a response packet using the second transmission method is not received from the host and the client insists on using the second transmission method, then the client uses the address contained in the response packet received from the host using the first

transmission method to configure a communications link to the host using the second transmission method.

All of Applicant's claims include the common feature of receiving from a host a response packet using a first communication method and using an address contained in the response packet to configure for communication with the host using the first communication method, or, alternatively, if the first transmission method must not be used and a response packet using a second transmission method is not received from the host, using the address contained in the response packet using the first communications method to configure for communication with the host using a second communication method. In rejecting the claims, the Examiner indicated that Nguyen's notification of a successful reachability test (col. 6, lines 60-62) corresponds to Applicant's provision of a response packet, and Nguyen's process of performing a unicast reachability test (col. 6, lines 3-12) corresponds to Applicant's provision of using an address contained in a response packet received using a first communications method to configure for communication with the host using a second communication method when the first communication method must not be used.

Applicant respectfully disagrees. Nguyen describes a method by which a server host creates and maintains a matrix of available communications protocols for each host pair, for example, between a host I and a host J. In the matrix, a first value indicates whether unreliable multicast communications between each host pair is possible, not possible, or not yet determined. Similarly, a second value indicates whether unreliable unicast communications between each host pair is possible, not possible, or not yet determined. Finally, a third optional value may be used to indicate whether reliable unicast communications between each host pair is possible, not possible, or not yet determined. The server host creates the matrix entries by initiating reachability tests between each host pair.

For example, the server host initiates a multicast reachability test from host I to host J by instructing host I to send a series of "reachability request" to host J over its well known multicast address. If host J receives a reachability request message from host I, host J notifies the server host that the multicast reachability test was successful. An unreliable unicast reachability test and, optionally, a reliable unicast reachability test are initiated and performed in a similar manner. From the notifications received from the receiving host, the server host is able to generate the matrix. Subsequently, when a host wants to communicate with another host, the host initiates a connection to the server host inquiring about available communications protocols to the other host. The server host examines the matrix entry for the host pair, and based on the values stored in the matrix entry, establishes a communications protocol for the host pair in the following order: multicast, unreliable unicast, and unicast. If the matrix entry indicates that none of the protocols are supported, then the server host acts as an intermediary between the two hosts. (see Nguyen, col. 5, line 38-col. 6, line 65).

This is in direct contrast to Applicant's technique where two nodes wanting to communicate with each other communicate directly with each other to determine an appropriate transmission method. In contrast, in Nguyen, the server host – a third party – is directly involved in determining the protocols that are supported and establishing a communication between two communicating hosts. Moreover, Nguyen's notification is an indication of a successful reachability test, and is provided by one of the hosts performing the reachability test to the server host. In contrast, Applicant's response packet is sent by one node directly to the other node in response to receiving a packet from the other node.

Further, Applicant can find nothing in Nguyen that suggests or teaches the concept of using an address contained in a response packet received using a first communications method to configure for communication with the host using a second communication method when the first communication method must not be used. In Nguyen, if a protocol is not supported by either of the hosts, then an indication is made in the matrix that the protocol cannot be used to establish communication between the hosts. Furthermore,

there is a predetermined order to the use of the protocols, and a protocol is used only if the server host determines from the matrix that each of the hosts can communicate using the particular protocol. If the server host determines from the matrix that none of the protocols can be used, the server host directly acts as an intermediary between the communicating hosts.

Conclusion

In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the pending rejections and issue a notice of allowance allowing pending claims 2, 4, 7-32, 35, 37, 39 and 42-59. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-8000.

Dated: 9/23/04

Respectfully submitted,

By _____

Do Te Kim
Registration No.: 46,231
PERKINS COIE LLP
P.O. Box 1247
Seattle, Washington 98111-1247
(206) 359-8000
(206) 359-4045 (Fax)
Attorney for Applicant